



INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

We make Indiana a cleaner, healthier place to live.

Frank O'Bannon
Governor

Lori F. Kaplan
Commissioner

100 North Senate Avenue
P. O. Box 6015
Indianapolis, Indiana 46206-6015
(317) 232-8603
(800) 451-6027
www.IN.gov/idem

Mr. Ken Sears
Polyfoam Packers Corporation
955 South Woodland Avenue
Michigan City, Indiana 46360

May 23, 2003

Re: 091-16666-00079
Minor Source Modification to:
Part 70 permit No.: T091-7666-00079

Dear Mr. Sears:

Polyfoam Packers Corporation was issued Part 70 operating permit T091-7666-00079 on October 14, 1999 for polystyrene shape molding operations. An application to modify the source was received on January 13, 2003. Pursuant to 326 IAC 2-7-10.5 the following emission units are approved for construction at the source:

one (1) Hirsch 6000 polystyrene pre-expander, identified as PE4, rated at 1500 pounds per hour and exhausting at stack S-36.

The following construction conditions are applicable to the proposed project:

General Construction Conditions

1. The data and information supplied with the application shall be considered part of this source modification approval. Prior to any proposed change in construction which may affect the potential to emit (PTE) of the proposed project, the change must be approved by the Office of Air Quality (OAQ).
2. This approval to construct does not relieve the permittee of the responsibility to comply with the provisions of the Indiana Environmental Management Law (IC 13-11 through 13-20; 13-22 through 13-25; and 13-30), the Air Pollution Control Law (IC 13-17) and the rules promulgated thereunder, as well as other applicable local, state, and federal requirements.
3. Effective Date of the Permit
Pursuant to IC 13-15-5-3, this approval becomes effective upon its issuance.
4. Pursuant to 326 IAC 2-1.1-9 and 326 IAC 2-7-10.5(i), the Commissioner may revoke this approval if construction is not commenced within eighteen (18) months after receipt of this approval or if construction is suspended for a continuous period of one (1) year or more.
5. All requirements and conditions of this construction approval shall remain in effect unless modified in a manner consistent with procedures established pursuant to 326 IAC 2.
6. Pursuant to 326 IAC 2-7-10.5(l) the emission units constructed under this approval shall not be placed into operation prior to revision of the source's Part 70 Operating Permit to incorporate the required operation conditions.

This minor source modification authorizes construction of the new emission units. Operating conditions shall be incorporated into the Part 70 operating permit as a significant permit modification in accordance with 326 IAC 2-7-10.5(l)(2) and 326 IAC 2-7-12. Operation is not approved until the significant permit modification has been issued.

This decision is subject to the Indiana Administrative Orders and Procedures Act - IC 4-21.5-3-5. If you have any questions on this matter call Linda Quigley at (973) 575-2555, extension 3284, or call (800) 451-6027, press 0 and ask for extension 3-6878.

Sincerely,

Original signed by Paul Dubenetzky
Paul Dubenetzky, Chief
Permits Branch
Office of Air Quality

Attachments

LQ/EVP

cc: File - LaPorte County
LaPorte County Health Department
Northwest Regional Office
Air Compliance Section Inspector - Rick Massoels
Compliance Data Section - Karen Nowak
Administrative and Development
Technical Support and Modeling - Michele Boner



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PART 70 OPERATING PERMIT and ENHANCED NEW SOURCE REVIEW OFFICE OF AIR MANAGEMENT

**Polyfoam Packers Corporation
955 Woodland Avenue
Michigan City, Indiana 46360**

(herein known as the Permittee) is hereby authorized to operate subject to the conditions contained herein, the source described in Section A (Source Summary) of this permit.

This permit is issued in accordance with 326 IAC 2 and 40 CFR Part 70 Appendix A and contains the conditions and provisions specified in 326 IAC 2-7 as required by 42 U.S.C. 7401, et. seq. (Clean Air Act as amended by the 1990 Clean Air Act Amendments), 40 CFR Part 70.6, IC 13-15 and IC 13-17.

Minor Source Modification: 091-16666-00079	Pages Affected: 7, 29, 30, 31, 31a, 31b
Issued by:Original signed by Paul Dubenetzky Paul Dubenetzky, Branch Chief Office of Air Quality	Issuance Date:May 23, 2003

- 28) One (1) molding press, model number 68, identified as P001, rated at 150 pounds per hour, and exhausting to stack S-33.
- 29) Sixteen (16) post expansion storage silos, identified as F28, each with a total maximum storage capacity of 972 pounds.
- 30) Two (2) molding presses, model type Kurtz K813, identified as MP28 and PM29, each rated at 150 pounds per hour;
- 31) One (1) Hirsch 6000 polystyrene pre-expander, identified as PE4, rated at 1500 pounds per hour and exhausting at stack S-36.

A.3 Specifically Regulated Insignificant Activities [326 IAC 2-7-1(21)] [326 IAC 2-7-4(c)]
[326 IAC 2-7-5(15)]

This stationary source also includes the following insignificant activities which are specifically regulated, as defined in 326 IAC 2-7-1(21):

- 1) One (1) boiler, model number CB 700-200, fueled by natural gas, heat input rate is 8.4 MMBtu per hour and exhausting to stack S-2.
- 2) Welding operations consisting of the following equipment:
 - (a) Miller matic wire welder, identified as MS-1;
 - (b) Small torch, identified as MS-2;
 - (c) Dialarc stick welder, identified as MS-3;
 - (d) Dialarc stick welder, identified as MS-4;
 - (e) Miller matic wire welder, identified as MS-5;
 - (f) Medium torch, identified as MS-6;
 - (g) Miller matic wire welder, identified as MS-7;
 - (h) Medium torch set, identified as MS-8;
 - (i) Dialarc stick welder, identified as MS-9; and
 - (j) Medium torch set, identified as MS-10.

A.4 Part 70 Permit Applicability [326 IAC 2-7-2]

This stationary source is required to have a Part 70 permit by 326 IAC 2-7-2 (Applicability) because:

- (a) It is a major source, as defined in 326 IAC 2-7-1(22).
- (b) It is a source in a source category designated by the United States Environmental Protection Agency (U.S. EPA) under 40 CFR 70.3 (Part 70 - Applicability).

SECTION D.2

FACILITY OPERATION CONDITIONS

Facility Description [326 IAC 2-7-5(15)]

Thirty-one (31) foam polystyrene storage silo with a maximum storage silo with a maximum storage capacity of 76,000 pounds.

One (1) polystyrene pre expander, model number 6000, rated at 1500 pounds per hour and exhausting to stack S-4.

One (1) molding press, model number 812, rated at 300 pounds per hour, and exhausting to stack S-11.

One (1) molding press, model number 68, rated at 150 pounds per hour, and exhausting to stack S-14.

One (1) molding press, model number 68, rated at 150 pounds per hour, and exhausting to stack S-15.

One (1) molding press, model number 68, rated at 150 pounds per hour, and exhausting to stack S-16.

One (1) molding press, model number 68, rated at 150 pounds per hour, and exhausting to stack S-17.

One (1) molding press, model number 68, rated at 150 pounds per hour, and exhausting to stack S-18.

One (1) molding press, model number 68, rated at 150 pounds per hour, and exhausting to stack S-19.

One (1) pre expander, rated at 500 pounds per hour, exhausting to stack S-5.

One (1) # 2 pre expander, rated at 1500 pounds per hour, exhausting to stack S-6.

Two (2) molding presses, each rated at 150 pounds per hour, one exhausting to stack S-7 and the other press exhausting to stack S-8.

One (1) molding press, model number 812, rated at 300 pounds per hour, and exhausting to stack S-12.

One (1) molding presses, model number 812, rated at 300 pounds per hour and exhausting to stack S-13.

One (1) molding press, model number 68, rated at 150 pounds per hour, and exhausting to stack S-20.

One (1) molding press, model number 68, rated at 150 pounds per hour, and exhausting to stack S-21.

One (1) molding press, model number BR 620, rated at 100 pounds per hour, and exhausting to stack S-23.

One (1) molding press, model number BR 620, rated at 100 pounds per hour, and exhausting to stack S-24.

One (1) molding press, model number BR 620, rated at 100 pounds per hour, and exhausting to stack S-25.

One (1) molding press, model number BR 620, rated at 100 pounds per hour, and exhausting to stack S-26.

One (1) molding press, model number BR 620, rated at 100 pounds per hour, and exhausting to stack S-27.

One (1) molding press, model number 1317, identified as P001, rated at 600 pounds per hour, and exhausting to stack S-28.

One (1) molding press, model number 813, identified as P001, rated at 300 pounds per hour, and exhausting to stack S-29.

One (1) molding press, model number 68, identified as P001, rated at 150 pounds per hour, and exhausting to stack S-30.

One (1) molding press, model number 68, identified as P001, rated at 150 pounds per hour, and exhausting to stack S-31.

One (1) molding press, model number 68, identified as P001, rated at 150 pounds per hour, and exhausting to stack S-32.

One (1) molding press, model number 68, identified as P001, rated at 150 pounds per hour, and exhausting to stack S-33.

Sixteen (16) post expansion storage silos, identified as F28, each with a total maximum storage capacity of 972 pounds.

Two (2) molding presses, model type Kurtz K813, identified as MP28 and PM29, each rated at 150 pounds per hour.

One (1) Hirsch 6000 polystyrene pre-expander, identified as PE4, rated at 1500 pounds per hour and exhausting at stack S-36.

(The information describing the process contained in this facility description box is descriptive information and does not constitute enforceable conditions.)

- (c) The Permittee shall continuously search for material with lower pentane and VOC content. The applicant shall submit an annual report within 30 days of January 1 describing the search conducted during the past twelve (12) months, results of the previous year's search, and schedule of switching to material with lower pentane and VOC content if the material is available. Compliance with this condition will fulfill the requests of 326 IAC 8-1-6.

D.2.5 Volatile Organic Compounds (VOC) [326 IAC 2-7-10.5] [326 IAC 8-1-6]

Any change or modification that will cause VOC emissions from the molding press identified as P001, to be equal to or greater than 25 tons per year shall require IDEM, OAM approval before such changes can take place.

D.2.6 Volatile Organic Compounds (VOC) [326 IAC 8-1-6]

- (a) The total input usage of volatile organic compounds (VOC) at the pre-expander, identified as PE4, shall be limited to 103.75 tons per twelve (12) consecutive month period, with compliance determined at the end of each month. Based on a VOC flash off factor of twenty-four percent (24%), this will limit VOC emissions to less than twenty-five (25) tons per twelve (12) consecutive month period.
- (b) Any change or modification that will cause VOC emissions from the pre-expander, identified as PE4, to be equal to or greater than twenty-five (25) tons per year shall require IDEM, OAM approval before such changes can occur.

This limit shall render the requirements of 326 IAC 8-1-6 (BACT) not applicable.

Compliance Determination Requirements

D.2.7 Testing Requirements [326 IAC 2-7-6(1)]

The Permittee is not required to test this facility by this permit. However, IDEM may require compliance testing at any specific time when necessary to determine if the facility is in compliance. If testing is required by IDEM, compliance with the VOC limit specified in Condition D.2.1 and D.2.2 shall be determined by a performance test conducted in accordance with Section C - Performance Testing.

D.2.8 Record Keeping Requirements

- (a) To document compliance with Conditions D.2.1, D.2.5 and D.2.6, the Permittee shall maintain records in accordance with (1) through (4) below. Records maintained for (1) through (4) shall be taken monthly and shall be complete and sufficient to establish compliance with the VOC usage limits and/or the VOC emission limits established in Conditions D.2.1 and D.2.5.
 - (1) The amount and VOC content of expandable polystyrene molding compound. Records shall include purchase orders, invoices, and material safety data sheets (MSDS) necessary to verify the type and amount used;
 - (2) A log of the dates of use;
 - (3) The total VOC usage for each month; and
 - (4) The weight of VOCs emitted for each compliance period.

- (b) To document compliance with Condition D.2.3, the Permittee shall maintain records of the average monthly pentane content which shall be less than 5.5%.
- (c) All records shall be maintained in accordance with Section C - General Record Keeping Requirements, of this permit.

D.2.8 Reporting Requirements

- (a) A quarterly summary of the information to document compliance with Condition D.2.1, D.2.4 and D.2.6 shall be submitted to the addresses listed in Section C - General Reporting Requirements, of this permit, using the reporting forms located at the end of this permit, or their equivalent, within thirty (30) days after the end of the quarter being reported.
- (b) To document compliance with Condition D.2.2, D.2.3 and D.2.4 the Permittee shall submit an annual report within 30 days of January 1 describing the search conducted during the past twelve (12) months, results of the previous years search, and schedule of switching material with lower pentane and VOC content if the material is available.

**INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY
COMPLIANCE DATA SECTION**

Part 70 Quarterly Report

Source Name: Polyfoam Packers Corporation
Source Address: 955 Woodland Avenue, Michigan City, Indiana 46360
Mailing Address: 955 Woodland Avenue, Michigan City, Indiana 46360
Part 70 Permit No.: T091-7666-00079
Facility: Hirsch pre-expander, identified as PE4.
Parameter: VOC
Limit: The total input usage of volatile organic compounds (VOC) at the pre-expander, identified as PE4, shall be limited to 103.75 tons per twelve (12) consecutive month period, with compliance determined at the end of each month. Based on a VOC flash off factor of twenty-four percent (24%), this will limit VOC emissions to less than twenty-five (25) tons per twelve (12) consecutive month period.

YEAR: _____

Month	Column 1	Column 2	Column 1 + Column 2
	VOC Usage This Month	VOC Usage Previous 11 Months	VOC Usage 12 Month Total
Month 1			
Month 2			
Month 3			

9 No deviation occurred in this quarter.

9 Deviation/s occurred in this quarter.
Deviation has been reported on: _____

Submitted by: _____

Title / Position: _____

Signature: _____

Date: _____

Phone: _____

Attach a signed certification to complete this report.

Indiana Department of Environmental Management Office of Air Quality

Technical Support Document (TSD) for a Minor Source Modification and Significant Permit Modification to a Part 70 Operating Permit

Source Background and Description

Source Name:	Polyfoam Packaging Corporation
Source Location:	955 Woodland Avenue, Michigan City, Indiana 46360
County:	LaPorte
SIC Code:	3086
Operation Permit No.:	T091-7666-00079
Operation Permit Issuance Date:	October 14, 1999
Source Modification No.:	MSM091-16666-00079
Permit Modification No.:	SPM091-16694-00079
Permit Reviewer:	Linda Quigley/EVP

The Office of Air Quality (OAQ) has reviewed a modification application from Polyfoam Packaging Corporation relating to the construction and operation of the following:

one (1) Hirsch 6000 polystyrene pre-expander, identified as PE4, rated at 1500 pounds per hour and exhausting at stack S-36.

History

On January 13, 2003, Polyfoam Packers Corporation submitted an application to the OAQ requesting to add an additional pre-expander to their existing plant. Polyfoam Packers is presently permitted to operate two (2) pre-expanders with a capacity of 1500 lbs per hour. The source requested a minor source modification to construct an additional pre-expander pursuant to 326 IAC 2-7-10.5(d)(5).

Even though this new construction is considered a minor source modification, a condition must be incorporated into the Part 70 permit to limit VOC emissions from the new pre-expander to less than twenty-five (25) tons per year. Therefore, a significant permit modification will be issued to incorporate the operating conditions.

Polyfoam Packers Corporation was issued a Part 70 permit on October 14, 1999.

Unpermitted Emission Units and Pollution Control Equipment

There are no unpermitted facilities operating at this source during this review process.

Existing Approvals

The source was issued a Part 70 Operating Permit T091-7666-00079 on October 14, 1999. The source has since received the following:

- (a) Administrative Amendment No.: 091-11627, issued on January 18, 2000;
- (b) Minor Source Modification No.: 091-12933, issued on January 4, 2001;
- (c) Administrative Amendment No.: 091-13602, issued on January 17, 2002;
- (d) Significant Source Modification No.: 091-14438, issued November 2, 2001;
- (e) Significant Permit Modification No.: 091-14496, issued November 20, 2001;
- (f) Permit Reopen No.: 091-13378, issued on February 13, 2002;
- (g) Administrative Amendment No.: 091-15889, issued March 20, 2002;
- (h) Significant Source Modification No.: 091-15084, issued April 3, 2002;
- (i) Significant Permit Modification No.: 091-15559, issued July 22, 2001;
- (j) Minor Source Modification No.: 091-15886, issued August 20, 2002; and
- (k) Minor Permit Modification No.: 091-15930, issued October 4, 2002.

Enforcement Issue

There are no enforcement actions pending.

Stack Summary

Stack ID	Operation	Height (feet)	Diameter (inches)	Flow Rate (acfm)	Temperature (°F)
S-36	Hirsch 6000 pre-expander	30	4	1000	160-220

Recommendation

The staff recommends to the Commissioner that the Minor Source Modification and Significant Permit Modification be approved. This recommendation is based on the following facts and conditions:

Unless otherwise stated, information used in this review was derived from the application and additional information submitted by the applicant.

An application for the purposes of this review was received on January 13, 2003.

Emission Calculations

See Appendix A of this document for detailed emissions calculations (one page).

Potential To Emit Before Controls (Modification)

Pursuant to 326 IAC 2-1.1-1(16), Potential to Emit is defined as “the maximum capacity of a stationary source to emit any air pollutant under its physical and operational design. Any physical or operational limitation on the capacity of a source to emit an air pollutant, including air pollution control equipment and restrictions on hours of operation or type or amount of material combusted, stored, or processed shall be treated as part of its design if the limitation is enforceable by the U. S. EPA.”

Pollutant	Potential To Emit (tons/year)
PM	0.00
PM-10	0.00
SO ₂	0.00
VOC	86.7
CO	0.00
NO _x	0.00
Single HAP	0.00
Combined HAPs	0.00

Justification for Modification

The Title V permit is being modified through a Minor Source Modification. This modification is being performed pursuant to 326 IAC 2-7-10.5(d)(5) for modifications for which the potential to emit is limited to less than twenty-five (25) tons per year of any regulated pollutant.

The Minor Source Modification will give the source approval to construct the new emission unit. A Significant Permit Modification (091-16694-00079) will be issued to incorporate the source modification into the Part 70 permit and will give the source approval to operate the new emission unit. The Significant Permit Modification is being performed pursuant to 326 IAC 2-7-12(d)(1) because the modification requires significant changes to the Part 70 permit conditions.

County Attainment Status

The source is located in LaPorte County.

Pollutant	Status
PM-10	attainment
SO ₂	attainment
NO ₂	attainment
Ozone	attainment
CO	attainment
Lead	attainment

Volatile organic compounds (VOC) are precursors for the formation of ozone. Therefore, VOC emissions are considered when evaluating the rule applicability relating to the ozone standards. LaPorte County has been designated as attainment or unclassifiable for ozone.

Source Status

Existing Source PSD or Emission Offset Definition (emissions after controls, based upon 8760 hours of operation per year at rated capacity and/or as otherwise limited):

Pollutant	Emissions (tons/year)
PM	less than 100
PM-10	less than 100
SO ₂	less than 100
VOC	greater than 100, less than 250
CO	less than 100
NO _x	less than 100

- (a) This existing source is not a major stationary source because no attainment regulated pollutant is emitted at a rate of 250 tons per year or more, and it is not one of the 28 listed source categories.
- (b) These emissions are based upon the Title V (T091-7666-00079) issued to the source on October 14, 1999.

Potential to Emit After Controls for the Modification

The table below summarizes the total potential to emit, reflecting all limits, of the significant emission units for the modification.

	Potential to Emit (tons/year)						
Process/facility	PM	PM-10	SO ₂	VOC	CO	NO _x	HAPs
Existing Source ¹	46.04	0.18	0.01	< 250	2.02	2.40	--
Hirsch 6000 pre-expander	--	--	--	< 25.0	--	--	--
Total Emissions	46.04	0.18	0.01	< 250 ²	2.02	2.40	--

¹ Based on the Potential to Emit after controls of entire source calculated in the Minor Source Modification No. 091-15886, issued on August 20, 2002.

² The source has agreed to maintain the source-wide VOC limit of less than 250 tons per year even with the addition of the Hirsch 6000 pre-expander to their existing operation. Thus, the source will still maintain its PSD minor source status.

This modification to an existing minor stationary source is not major because the emission increase is less than the PSD significant levels. Therefore, pursuant to 326 IAC 2-2, the PSD requirements do not apply.

Federal Rule Applicability

- (a) There are no New Source Performance Standards (NSPS)(326 IAC 12 and 40 CFR Part 60) applicable to this source.
- (b) There are no National Emission Standards for Hazardous Air Pollutants (NESHAPs)(326 IAC 14 and 40 CFR Part 63) applicable to this source.

State Rule Applicability - Entire Source

326 IAC 2-2 (Prevention of Significant Deterioration)

This source is still not a major source because this type of operation is not one of the twenty-eight (28) listed source categories under 326 IAC 2-2, and the source-wide volatile organic compounds are limited to less than 250 tons per twelve consecutive month period. Pursuant to 326 IAC 2-2, the PSD requirements do not apply.

326 IAC 2-4.1 (Major Sources of Hazardous Air Pollutants (HAP))

Pursuant to 326 IAC 2-4.1-1 (New Source Toxics Control), any new process or production unit, which in and of itself emits or has the PTE 10 tons per year of any HAP or 25 tons per year of the combination of HAPs, and is constructed or reconstructed after July 27, 1997, must be controlled using technologies consistent with Maximum Achievable Control Technology (MACT). There are no HAPs emitted from this modification. Therefore, 326 IAC 2-4.1 does not apply.

326 IAC 2-6 (Emission Reporting)

This source is subject to 326 IAC 2-6 (Emission Reporting), because it has the potential to emit more than one hundred (100) tons per year of volatile organic compounds (VOC). Pursuant to this rule, the owner/operator of the source must annually submit an emission statement for the source. The annual statement must be received by July 1 of each year and contain the minimum requirement as specified in 326 IAC 2-6-4. The submittal should cover the period defined in 326 IAC 2-6-2(8)(Emission Statement Operating Year).

326 IAC 5-1 (Opacity Limitations)

Pursuant to 326 IAC 5-1-2 (Opacity Limitations), except as provided in 326 IAC 5-1-3 (Temporary Alternative Opacity Limitations), opacity shall meet the following, unless otherwise stated in this permit:

- (a) Opacity shall not exceed an average of forty percent (40%) any one (1) six (6) minute averaging period as determined in 326 IAC 5-1-4.
- (b) Opacity shall not exceed sixty percent (60%) for more than a cumulative total of fifteen (15) minutes (sixty (60) readings as measured according to 40 CFR 60, Appendix A, Method 9 or fifteen (15) one (1) minute nonoverlapping integrated averages for a continuous opacity monitor) in a six (6) hour period.

State Rule Applicability - Individual Facilities

326 IAC 6-3-2 (Process Operations)

The one (1) Hirsch 6000 pre-expander is not subject to 326 IAC 6-3-2 (Process Operations) because it does not emit any PM.

326 IAC 8-1-6 (New Facilities, General Reduction Requirements)

Provisions of 326 IAC 8-1-6 apply to facilities located in any county constructed after January 1, 1980, which are not otherwise regulated by any other provisions of 326 IAC 8, and have potential VOC emissions of 25 tons per year or greater. The new Hirsch pre-expander shall be limited to less than 25 tons per 12 consecutive month period, with compliance determined at the end of each month. Therefore, the requirements of 326 IAC 8-1-6 shall not apply.

Compliance Requirements

Permits issued under 326 IAC 2-7 are required to ensure that sources can demonstrate compliance with applicable state and federal rules on a more or less continuous basis. All state and federal rules contain compliance provisions, however, these provisions do not always fulfill the requirement for a more or less continuous demonstration. When this occurs IDEM, OAQ, in conjunction with the source, must develop specific conditions to satisfy 326 IAC 2-7-5. As a result, compliance requirements are divided into two sections: Compliance Determination Requirements and Compliance Monitoring Requirements.

Compliance Determination Requirements in Section D of the permit are those conditions that are found more or less directly within state and federal rules and the violation of which serves as grounds for enforcement action. If these conditions are not sufficient to demonstrate continuous compliance, they will be supplemented with Compliance Monitoring Requirements, also Section D of the permit. Unlike Compliance Determination Requirements, failure to meet Compliance Monitoring conditions would serve as a trigger for corrective actions and not grounds for enforcement action. However, a violation in relation to a compliance monitoring condition will arise through a source's failure to take the appropriate corrective actions within a specific time period.

There are no compliance monitoring requirements for this facility.

Changes Proposed

The changes listed below have been made to the Part 70 Operating Permit (T091-7666-00079) through proposed Significant Permit Modification No.: 091-16694-00079:

- 1) The Hirsch 6000 pre-expander is being added to Section A.2 as follows.

A.2 Emission Units and Pollution Control Equipment Summary [326 IAC 2-7-4(c)(3)] [326 IAC 2-7-5(15)]

This stationary source consists of the following emission units and pollution control devices:

- 1) One (1) boiler, model number CB 700-250, fueled by natural gas, heat input rate is 10.5 MMBtu per hour and exhausting to stack S-1.
- 2) Thirty-one (31) foam polystyrene storage silos with a total maximum storage capacity of 76,000 pounds.
- 3) One (1) polystyrene pre expander, model number 6000, rated at 1500 pounds per hour and exhausting to stack S-4.
- 4) One (1) molding press, model number 812, rated at 300 pounds per hour, and exhausting to stack S-11.
- 5) One (1) molding press, model number 68, rated at 150 pounds per hour, and exhausting to stack S-14.
- 6) One (1) molding press, model number 68, rated at 150 pounds per hour, and exhausting to stack S-15.

- 7) One (1) molding press, model number 68, rated at 150 pounds per hour, and exhausting to stack S-16.
- 8) One (1) molding press, model number 68, rated at 150 pounds per hour, and exhausting to stack S-17.
- 9) One (1) molding press, model number 68, rated at 150 pounds per hour, and exhausting to stack S-18.
- 10) One (1) molding press, model number 68, rated at 150 pounds per hour, and exhausting to stack S-19.
- 11) One (1) pre expander, rated at 500 pounds per hour and exhausting to stack S-5.
- 12) One (1) # 2 pre expander, rated at 1500 pounds per hour, exhausting to stack S-6.
- 13) Two (2) molding presses, each rated at 150 pounds per hour, one exhausting to stack S-7 and the other press exhausting to stack S-8.
- 14) One (1) molding press, model number 812, rated at 300 pounds per hour, and exhausting to stack S-12.
- 15) One (1) molding presses, model number 812, rated at 300 pounds per hour and exhausting to stack S-13.
- 16) One (1) molding press, model number 68, rated at 150 pounds per hour, and exhausting to stack S-20.
- 17) One (1) molding press, model number 68, rated at 150 pounds per hour, and exhausting to stack S-21.
- 18) One (1) molding press, model number BR 620, rated at 100 pounds per hour, and exhausting to stack S-22.
- 19) One (1) molding press, model number BR 620, rated at 100 pounds per hour, and exhausting to stack S-23.
- 20) One (1) molding press, model number BR 620, rated at 100 pounds per hour, and exhausting to stack S-24.
- 21) One (1) molding press, model number BR 620, rated at 100 pounds per hour, and exhausting to stack S-25.
- 22) One (1) molding press, model number BR 620, rated at 100 pounds per hour, and exhausting to stack S-26.
- 23) One (1) molding press, model number BR 620, rated at 100 pounds per hour, and exhausting to stack S-27.
- 24) One (1) molding press, Kohler model 609, rated at 400 pounds per hour and exhausting to Stack S-10.
- 25) One (1) molding press, model number 1317, identified as P001, rated at 600 pounds per hour, and exhausting to stack S-28.
- 26) One (1) molding press, model number 813, identified as P001, rated at 300 pounds per hour, and exhausting to stack S-29.

- 27) One (1) molding press, model number 68, identified as P001, rated at 150 pounds per hour, and exhausting to stack S-30.
 - 28) One (1) molding press, model number 68, identified as P001, rated at 150 pounds per hour, and exhausting to stack S-31.
 - 29) One (1) molding press, model number 68, identified as P001, rated at 150 pounds per hour, and exhausting to stack S-32.
 - 30) One (1) molding press, model number 68, identified as P001, rated at 150 pounds per hour, and exhausting to stack S-33.
 - 31) One (1) molding press, model number EHV-C, identified as P001, rated at 300 pounds per hour, and exhausting to stack S-34.
 - 32) Sixteen (16) post expansion storage silos, identified as F28, each with a total maximum storage capacity of 972 pounds.
 - 33) One (1) Hirsch 6000 polystyrene pre-expander, identified as PE4, rated at 1500 pounds per hour and exhausting at stack S-36.**
- 2) The Hirsch 6000 polystyrene pre-expander has been added to the facility description in Section D.2 as follows:

Facility Description [326 IAC 2-7-5(15)]

Thirty-one (31) foam polystyrene storage silo with a maximum storage silo with a maximum storage capacity of 76,000 pounds.

One (1) polystyrene pre expander, model number 6000, rated at 1500 pounds per hour and exhausting to stack S-4.

One (1) molding press, model number 812, rated at 300 pounds per hour, and exhausting to stack S-11.

One (1) molding press, model number 68, rated at 150 pounds per hour, and exhausting to stack S-14.

One (1) molding press, model number 68, rated at 150 pounds per hour, and exhausting to stack S-15.

One (1) molding press, model number 68, rated at 150 pounds per hour, and exhausting to stack S-16.

One (1) molding press, model number 68, rated at 150 pounds per hour, and exhausting to stack S-17.

One (1) molding press, model number 68, rated at 150 pounds per hour, and exhausting to stack S-18.

One (1) molding press, model number 68, rated at 150 pounds per hour, and exhausting to stack S-19.

One (1) pre expander, rated at 500 pounds per hour, exhausting to stack S-5.

One (1) # 2 pre expander, rated at 1500 pounds per hour, exhausting to stack S-6.

Two (2) molding presses, each rated at 150 pounds per hour, one exhausting to stack S-7 and the other press exhausting to stack S-8.

One (1) molding press, model number 812, rated at 300 pounds per hour, and exhausting to stack S-12.

One (1) molding presses, model number 812, rated at 300 pounds per hour and exhausting to stack S-13.

One (1) molding press, model number 68, rated at 150 pounds per hour, and exhausting to stack S-20.

One (1) molding press, model number 68, rated at 150 pounds per hour, and exhausting to stack S-21.

One (1) molding press, model number BR 620, rated at 100 pounds per hour, and exhausting to stack S-22.

One (1) molding press, model number BR 620, rated at 100 pounds per hour, and exhausting to stack S-23.

One (1) molding press, model number BR 620, rated at 100 pounds per hour, and exhausting to stack S-24.

One (1) molding press, model number BR 620, rated at 100 pounds per hour, and exhausting to stack S-25.

One (1) molding press, model number BR 620, rated at 100 pounds per hour, and exhausting to stack S-26.

One (1) molding press, model number BR 620, rated at 100 pounds per hour, and exhausting to stack S-27.

One (1) molding press, Kohler model 609, rated at 400 pounds per hour, and exhausting to Stack S-10.

One (1) molding press, model number 1317, identified as P001, rated at 600 pounds per hour, and exhausting to stack S-28.

One (1) molding press, model number 813, identified as P001, rated at 300 pounds per hour, and exhausting to stack S-29.

One (1) molding press, model number 68, identified as P001, rated at 150 pounds per hour, and exhausting to stack S-30.

One (1) molding press, model number 68, identified as P001, rated at 150 pounds per hour, and exhausting to stack S-31.

One (1) molding press, model number 68, identified as P001, rated at 150 pounds per hour, and exhausting to stack S-32.

One (1) molding press, model number 68, identified as P001, rated at 150 pounds per hour, and exhausting to stack S-33.

One (1) molding press, model number EHV-C, identified as P001, rated at 300 pounds per hour, and exhausting to stack S-34.

Sixteen (16) post expansion storage silos, identified as F28, each with a total maximum storage capacity of 972 pounds.

One (1) Hirsch 6000 polystyrene pre-expander, identified as PE4, rated at 1500 pounds per hour and exhausting at stack S-36.

(The information describing the process contained in this facility description box is descriptive information and does not constitute enforceable conditions.)

- 3) Condition D.2.6 has been added to limit VOC emissions from the new pre-expander to less than twenty-five tons per twelve (12) consecutive month period (Subsequent D conditions have been renumbered).

D.2.6 Volatile Organic Compounds (VOC) [326 IAC 8-1-6]

- (a) **The total input usage of volatile organic compounds (VOC) at the pre-expander, identified as PE4, shall be limited to 103.75 tons per twelve (12) consecutive month period, with compliance determined at the end of each month. Based on a VOC flash off factor of twenty-four percent (24%), this will limit VOC emissions to less than twenty-five (25) tons per twelve (12) consecutive month period.**
- (b) **Any change or modification that will cause VOC emissions from the pre-expander, identified as PE4, to be equal to or greater than twenty-five (25) tons per year shall require IDEM, OAQ approval before such changes can occur.**

This limit shall render the requirements of 326 IAC 8-1-6 (BACT) not applicable.

- 4) Record keeping requirements have been modified to include Condition D.2.6.

Record Keeping and Reporting Requirement [326 IAC 2-7-5(3)] [326 IAC 2-7-19]

~~D.2.7~~ D.2.8 Record Keeping Requirements

- (a) To document compliance with Conditions D.2.1, ~~and D.2.5 and D.2.6~~, the Permittee shall maintain records in accordance with (1) through (4) below. Records maintained for (1) through (4) shall be taken monthly and shall be complete and sufficient to establish compliance with the VOC usage limits and/or the VOC emission limits established in Conditions D.2.1 and D.2.5.
- (1) The amount and VOC content of expandable polystyrene molding compound. Records shall include purchase orders, invoices, and material safety data sheets (MSDS) necessary to verify the type and amount used;
- (2) A log of the dates of use;
- (3) The total VOC usage for each month; and
- (4) The weight of VOCs emitted for each compliance period.
- ~~(b) All records shall be maintained in accordance with Section C - General Record Keeping Requirements, of this permit.~~
- ~~(c)~~ (b) To document compliance with Condition D.2.3, the Permittee shall maintain records of the average monthly pentane content which shall be less than 5.5%.

~~(b)~~(c) All records shall be maintained in accordance with Section C - General Record Keeping Requirements, of this permit.

- 5) Reporting requirements have been revised to include a quarterly summary of the information to document compliance with Condition D.2.6. A quarterly report form has been included.

~~D.2.8~~ **D.2.9** Reporting Requirements

- (a) A quarterly summary of the information to document compliance with Condition D.2.1, ~~and D.2.4 and D.2.6~~ shall be submitted to the addresses listed in Section C - General Reporting Requirements, of this permit, using the reporting forms located at the end of this permit, or their equivalent, within thirty (30) days after the end of the quarter being reported.
- (b) To document compliance with Condition D.2.2, D.2.3 and D.2.4 the Permittee shall submit an annual report within 30 days of January 1 describing the search conducted during the past twelve (12) months, results of the previous years search, and schedule of switching material with lower pentane and VOC content if the material is available.

Conclusion

The construction and operation of the Hirsch 6000 pre-expander (PE4) shall be subject to the conditions of the attached proposed Minor Source Modification No. 091-16666-00079 and Significant Permit Modification No. 091-16694-00079.

Appendix A: Emissions Calculations

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VOC

Hirsch 6000 Pre-Expander

Company Name: Polyfoam Packers Corporation
Address City IN Zip: 955 Woodland Avenue, Michigan City, IN 46360
MSM: 091-16666-00079
Pit ID: 091-00079
Reviewer: LQ/ENV
Application Rec.: 01/13/2003

Estimation of volatile organic compounds (VOC) emissions due to the processing of molding compound is based on the following criteria:

- 1) the maximum potential throughput of molding compound is 1500 lbs/hr;
- 2) pentane is the only VOC emitted;
- 3) the molding compound contains a maximum average of 5.5% pentane; and
- 4) there is a 24.0% VOC loss at pre-expansion.

The potential VOC (pentane) emissions are thus calculated as follows:

$$\begin{aligned}\text{Potential VOC emissions} &= 1500 \text{ lb/hr} * 0.0132 * 8760 \text{ hr/yr} * (1/2000) \text{ ton/lb} \\ &= 19.8 \text{ lb/hr} \\ &= 86.72 \text{ tpy}\end{aligned}$$